

ABSTRAK

Air bersih merupakan kebutuhan yang tidak dapat dilepaskan dari kegiatan di sebuah gedung perkantoran. Mengingat akan pentingnya kebutuhan air bersih di sebuah gedung bertingkat/perkantoran, maka ketersediaan dan kualitas air bersih tersebut harus di pertahankan. Tingginya *downtime* pada Pompa Centrifugal di Gedung Kementerian Kelautan dan Perikanan Republik Indonesia mengakibatkan banyaknya komplain dari pengguna gedung. Tujuan analisa ini adalah untuk mengetahui persentase nilai *Overall Equipment Effectiveness* pompa centrifugal, memberikan rekomendasi perbaikan untuk meningkatkan nilai (OEE) menggunakan prinsip – prinsip *Total Productive Maintenance* (TPM) lalu menghitung kembali nilai (OEE) pompa centrifugal setelah dilakukan perbaikan. Penelitian ini menggunakan metode studi literatur, observasi lapangan, wawancara, perhitungan nilai *Overall Equipment Effectiveness* berdasarkan tiga sudut pandang *Availability*, *Performance* dan *Quality* dengan menerapkan rumus – rumus yang berhubungan dengan perhitungan (OEE), melakukan analisis *six big losses* guna mengetahui faktor dominan yang menyebabkan menurunnya performansi pompa centrifugal. Berdasarkan data dapat diketahui bahwa nilai *Overall Equipment Effectiveness* pada performansi Pompa Centrifugal bulan April – September 2019 nilai OEE tertinggi yang pernah dicapai adalah sebesar **72.7%**, sedangkan nilai OEE terendahnya adalah sebesar **64.7%**, nilai rata – rata tersebut masih dibawah standar *World Class*. Setelah dilakukan perbaikan dengan menerapkan prinsip – prinsip *Total Productive Maintenance* (TPM) nilai *Overall Equipment Effectiveness* Pompa Centrifugal bulan Januari – Juni 2020, nilai OEE tertinggi yang pernah dicapai adalah **96.0%**, sedangkan nilai terendahnya adalah sebesar **92.0%**, nilai tersebut sudah memenuhi nilai standar *World Class* OEE >**85%**.

Kata Kunci : *Overall Equipment Effectiveness, Total Productive Maintenance, Six Big Losses, Pompa Centrifugal*

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ABSTRACT

Clean water is a necessity that cannot be released from activities in an office building. Considering the importance of clean water needs in high rise/office building, the availability and quality of clean water must be maintained. The high downtime at Centrifugal Pump in the Ministry of Maritime Affairs and Fisheries Building of the Republic of Indonesia has resulted in many complaints from building users. The purpose of this analysis to determine the percentage of Overall Equipment Effectiveness value of centrifugal pumps, provide recommendations for improvement to increase the value (OEE) using the principles of Total Productive Maintenance (TPM) and the recalculated the value (OEE) of the centrifugal pump after repairs. This research uses literature study, field observations, interviews, the calculation of the value of Overall Equipment Effectiveness based on the three points of view Availability, Performance and Quality by applying formulas related to calculations (OEE), analyzing the six big losses to find out the dominant factors that cause decreased performance of the centrifugal pumps. Based on the data it can be seen that the Overall Equipment Effectiveness value on Centrifugal Pump performance from April to September 2019 the highest OEE value ever achieved was 72.7%, while the lowest OEE value was 64.7%, the average value is still below World Class standards. After making improvements by applying the principles of Total Productive Maintenance (TPM) value of Overall Equipment Effectiveness of Centrifugal Pump in January – June 2020, the highest OEE value ever achieved was 96.0%, while the lowest value was 92.0%, the value has met the standard value World Class OEE >85%.

Keywords : Overall Equipment Effectiveness, Total Productive Maintenance, Six Big Losses, Centrifugal Pump

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